Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

Claim 1 (currently amended). A method for physical vapor deposition, the method which comprises:

providing a target region and a substrate region disposed in a process region;

providing an electric field between the target region and the substrate region and using the electric field for partially ionizing process gas constituents in the process region, accelerating ionized process gas constituents toward the target region, ejecting target constituents by using process gas constituents and partially depositing ejected target constituents on the substrate region; ~~and~~

generating a magnetic field substantially vanishing in one of given regions and given sectors of at least one of the target region and the substrate region at least when averaged over time and rotating the magnetic field about a rotation axis; and

generating the magnetic field such that the magnetic field substantially vanishes outside the rotation axis in one of given regions and given sectors of at least one of the target region and the substrate region at least when averaged over time.

Claim 2 (original). The method according to claim 1, which comprises using, as the rotation axis, an axis extending through the target region and the substrate region such that the axis connects the target region and the substrate region to one another.

Claim 3 (original). The method according to claim 1, which comprises using, as the rotation axis, a symmetry axis extending through the target region and the substrate region such that the symmetry axis connects the target region and the substrate region to one another.

Claim 4 (cancelled).

Claim 5 (original). The method according to claim 1, which comprises using, as the magnetic field, a combination of at least a first magnetic field component and at least a second magnetic field component such that the first and second magnetic field components are one of directly oppositely

polarized and directly oppositely directed with respect to one another but otherwise are substantially identical.

Claim 6 (original). The method according to claim 5, which comprises one of generating and using the first and second magnetic field components simultaneously.

Claim 7 (original). The method according to claim 5, which comprises one of generating and providing the first and second magnetic field components diametrically oppositely with regard to the rotation axis and antisymmetrically with respect to one another.

Claim 8 (original). The method according to claim 5, which comprises one of generating and providing the first and second magnetic field components temporally separately with respect to one another.

Claim 9 (original). The method according to claim 8, which comprises choosing first and second time periods for one of a separate use and a separate generation of the first and second magnetic field components such that the first and second time periods are individually substantially identical to one another.

Claim 10 (original). The method according to claim 8, which comprises choosing first and second time periods of one of a separate use and a separate generation of the first and second magnetic field components such that respective sums of the first and second time periods are substantially identical to one another.

Claim 11 (original). The method according to claim 5, which comprises generating one of the second and first magnetic field component from one of the first and second magnetic field component, respectively, by performing, with a respective magnetic field device, an action selected from the group consisting of a polarity reversal, a rotation and a positioning of the magnetic field device.

Claim 12 (currently amended). A PVD apparatus, comprising:

a target region and a substrate region disposed spatially separated from one another in a process region containing a process gas and with an electric field to be generated between said target region and said substrate region; ~~and~~

a magnetic field device configured to generate a magnetic field at least at one of said target region and said substrate region such that the magnetic field substantially vanishes in

one of given regions and given sectors of at least one of said target region and said substrate region at least when averaged over time and such that the magnetic field rotates about a rotation axis; and

said magnetic field device generating the magnetic field such that the magnetic field substantially vanishes outside the rotation axis in at least one of the given regions and the given sectors of at least one of said target region and said substrate region at least when averaged over time.

Claim 13 (original). The PVD apparatus according to claim 12, wherein the rotation axis extends through said target region and said substrate region such that the rotation axis connects said target region and said substrate region to one another.

Claim 14 (original). The PVD apparatus according to claim 12, wherein the rotation axis is a symmetry axis extending through said target region and said substrate region such that the symmetry axis connects said target region and said substrate region to one another.

Claim 15 (cancelled).

Claim 16 (original). The PVD apparatus according to claim 12, wherein said magnetic field device is configured to generate at least a first magnetic field component and at least a second magnetic field component such that the first and second magnetic field components are one of directly oppositely polarized and directly oppositely directed with respect to one another but otherwise are substantially identical.

Claim 17 (original). The PVD apparatus according to claim 12, wherein said magnetic field device includes at least one first magnetic field device and at least one second magnetic field device.

Claim 18 (original). The PVD apparatus according to claim 17, wherein said first and second magnetic field devices are configured such that they are oppositely polarized.

Claim 19 (original). The PVD apparatus according to claim 17, wherein said first and second magnetic field devices are positioned such that they are oppositely polarized.

Claim 20 (original). The PVD apparatus according to claim 17, wherein said first and second magnetic field devices are disposed diametrically oppositely with regard to the rotation axis.

Claim 21 (original). The PVD apparatus according to claim 12, wherein said magnetic field device is rotatable about the rotation axis.

Claim 22 (original). The PVD apparatus according to claim 12, wherein said magnetic field device is rotatable about the rotation axis and disposed above said target region outside said process region.

Claim 23 (original). The PVD apparatus according to claim 12, wherein:

said magnetic field device is a single magnetic device having a body axis; and

said magnetic device is configured to be one of moved and rotated about the body axis of said magnetic device at least between a first position and a second position and said magnetic device is configured to generate, in the first position, substantially a first magnetic field component and, in the second position, substantially a second magnetic field component such that the first and second magnetic field components are one of directly oppositely oriented with

respect to one another and directly oppositely polarized with respect to one another.

Claim 24 (original). The PVD apparatus according to claim 23, wherein the body axis of said magnetic device is one of parallel and perpendicular to the rotation axis.

Claim 25 (original). The PVD apparatus according to claim 12, wherein said magnetic field device has a magnetic field shielding device for shielding the magnetic field.

Claim 26 (original). The PVD apparatus according to claim 17, wherein said first and second magnetic field devices have respective magnetic field shielding devices for shielding one of respective magnetic fields and respective magnetic field components from said target region.

Claim 27 (original). The PVD apparatus according to claim 25, wherein the magnetic field shielding device includes a material of high magnetic permeability.

Claim 28 (original). The PVD apparatus according to claim 12, wherein said magnetic field device is configured to be displaceable in a direction of the rotation axis of the magnetic field.

Claim 29 (original). The PVD apparatus according to claim 12, wherein said magnetic field device is configured to be displaceable in a direction of the rotation axis of the magnetic field between a first position relatively closer to said target region and a second position relatively more remote from said target region.

Claim 30 (original). The PVD apparatus according to claim 17, wherein said first and second magnetic field devices are configured to be displaceable in a direction of the rotation axis of the magnetic field.

Claim 31 (original). The PVD apparatus according to claim 12, whèrein said magnetic field device includes at least one permanent magnet.

Claim 32 (original). The PVD apparatus according to claim 12, wherein said magnetic field device includes at least one current-carrying conductor.

Claim 33 (original). The PVD apparatus according to claim 12, wherein said magnetic field device includes at least one current-carrying coil.

Claim 34 (original). The PVD apparatus according to claim 12, wherein said magnetic field device includes at least one of conductors and coils configured to carry electrical currents in a controlled manner and independently of one another.

Claim 35 (original). The PVD apparatus according to claim 34, wherein at least one of said conductors and said coils generate a rotating magnetic field having a controllable orientation.